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Cash Flow or Income?

The Choice of Base for Company Taxation

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Cash flow and equity income are two alternative bases for company taxation. Before a country implements a cash-flow tax, it must first sort out problems arising from administrative complexities — particularly tax evasion — from international tax coordination and competition, and from the problems of transition.

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Cash flow and equity income are two alternative bases advocated for company taxation. Recent literature has stressed the merits of the cash-flow tax because of its simplicity and its neutral impact on capital and financing decisions. But cash flow taxation merits a closer look in terms of:

- Administrative complexity.

- International tax coordination and competition.

- Transition problems.

International issues and administrative complexities — particularly tax evasion — present problems that must be sorted out before a country decides to implement a cash-flow tax.

The motive for adopting a company tax depends in part on the type of personal tax that is desired and the degree to which a country may wish to withhold income from foreigners. But the question arises in policy debate about whether a particular tax base can be effectively implemented, taking into account administrative weaknesses and requirements — as well as other (especially international) considerations.

In a closed economy — especially one that relies on a personal consumption tax — the cash-flow tax seems a simple, efficient form of company taxation, administratively straightforward and neutral with regard to investment decisions. The more complicated equity-income tax is harder to defend in a closed economy.

Few countries have had experience with cash-flow taxes, however, so it is impossible to predict what administrative and other practical difficulties such a tax will pose.

In a country with a large foreign-owned sector, the equity-income tax may be the best form of tax for withholding income from foreigners. This is particularly true if the tax is credited against foreign taxes and so, in certain circumstances, has little effect on investment. Otherwise, the tax is distortionary.

A case can be made for the cash flow tax in an open economy as well. Sometimes — for example, with petroleum and mining royalties, which are meant to be taxes on resource "rent" — taxes are not credited at all against foreign taxes. The cash flow tax has the virtue of being neutral, while continuing to withhold rents accruing to foreigners. (A value-added tax on a destination basis does not do so, since the tax is paid only by residents.)

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I. Introduction

Considerable interest has been expressed in recent years by tax theorists as well as practitioners for the taxation of companies based on their cash flow. The approach is, conceptually, simple: the tax base is just the difference between the receipts from the sale of goods and services, and current and capital expenditures of the enterprise, during the period in question. No effort is made to calculate the very tricky numbers that lie at the core of standard company taxes based on income--such as the fraction of the total outlay on an asset that actually befalls the company as an economic cost (depreciation) in the period in question, which can only be measured as the reduction in the value of the asset from one period to the next, except that this is a complicated concept that cannot as such be the basis for taxation in practice. Nor is it necessary, under this alternative approach, to engage in complex exercises such as the separation of the real cost from the inflation-correction components of interest. Only cash-flow matters (whether on real transactions only, or including financial flows, depending on the definition adopted).[1]

Unlike the equity-income tax base, which requires the deductibility of economic depreciation and debt financing costs, the cash flow base expenses capital at the point of purchase, eliminating the need for the subsequent costing of this capital (through the compounding of the depreciation it suffers, and the interest cost incurred in financing it). The basic principle of the cash flow tax is thus that the full cost of capital is deductible as a stock, directly and fully, instead of seeking to operate with the counterpart flow which is the annualized depreciation and interest cost of holding that same capital in the years ahead. Since the true cost of capital is correctly and fully measured from the beginning, the cash flow tax falls on economic <u>rents</u>: the profit generated over and beyond the user cost of parts, services, factors of production and risk. And with cost deducted upfront, the form of finance does not come into the equation, and the tax thus also avoids the pro-debt bias of income taxes that does not allow the imputed cost of equity financing to be deducted from the base.

Notwithstanding the economic argument for this novel form of taxation, it is noteworthy that as many major tax reports that have been produced over the last two decades have supported its adoption as those that have rejected it, preferring instead to stay within the income-tax approach merely seeking to perfect it. Thus, both the U.S. Treasury Report of 1977 and the U.K. Meade Report of 1978 considered worth exploring the adoption of cash-flow taxation as a form of real tax. In contrast, the 1967 Royal Commission on Taxation in Canada (the Carter Report) and the U.S. Treasury Report of 1984 argued in favor of different streamlined variants of the company tax levied on equity income[2]--in the second case advocating its partial integration for both domestic and foreign owners plus its full indexation for inflation.

Although most countries use equity income as the tax base, in practice the <u>fiscal</u> definition of income rarely resembles true equity income earned by the shareowners. For example, replacement-cost depreciation is generally not deductible from the tax base--instead depreciation is based on the original price of the asset. Interest, unadjusted for inflation, is (almost always) deductible from the tax base, even though it is now widely recognized that it is only its real component that should be allowed for deduction. Also, it is often difficult to tax income on an accrual basis, as for example in the case of a project that takes several years to construct before earning income. And it is interesting to notice that, in fact, since it is not possible to measure equity income accurately, cash flow methods are often used to tax company income. This may include both the delay or non-deductibility of interest, and the expensing of assets such as advertising and research and development. Thus, most company tax systems have some elements of cash flow taxation even if they are largely taxes on accrued equity income.

In fact, many company tax systems in less-developed countries provide substantial tax incentives for capital. These tax systems are neither "income" nor "cash flow" but some sort of "hybrid" system, often with substantial tax writeoffs that subsidize the use of capital at the margin. The incentives include tax holidays, investment allowances and the expensing of capital. As a result, these "income" tax systems are more generous in their treatment of capital than cash flow taxes since both interest is deductible <u>and</u> capital is expensed. This affords a "double deduction" for capital outlays and encourages the use of capital relative to a cash flow tax regime. Moreover, in the presence of these tax incentives, the company "income" tax may be a poor collector of "rent".

Recent tax reform measures adopted by a large number of developing countries have led to a broadening of the company income tax base coupled with reductions in statutory rates. But while a central objective of tax reform has been to move the tax base closer to a duly-defined-income base, (i) administrative limitations have in some cases turned out to be more serious than expected; and (ii) the political will to implement a serious and comprehensive reform of the income tax has in some respects often not prevailed--an example, combining elements of both of these points, is the view taken by many policy makers in various countries that a tax system incorporating the main adjustments required to account for inflation is too complicated to implement. Instead, reform efforts often attempt to make company taxable income closer to an accountant's measure of book profit earned by a firm.

On the other hand, it is precisely because income taxes are difficult to implement--other than riddled by imperfections--that some economists argue in favor of cash-flow taxation, on the basis that it is simpler to implement. The tax base does not need to be indexed for inflation. Neither is economic depreciation measured. Moreover, revenues and costs can be measured on a cash rather than an accrual basis. However, only in a few limited cases have cash flow taxes been used for tax purposes. Some countries, which import capital from abroad, have argued that a rent base is too small, and since company taxes are credited against foreign corporate taxes, a shift from income to cash flow tax may simply result in a transfer of tax revenue from the capital-importing to the capital-exporting countries' treasuries. More importantly, (i) policy-makers often fear that it would be too difficult to implement a cash-flow tax in practice, for a number of technical reasons which are discussed in more detail below. And, realistically, (ii) countries are manifestly averse to increasing the international community's collective stock of knowledge and experience on these matters by volunteering as fiscal guinea-pigs, adopting a tax that has been neither tried in practice in any meaningful way nor sufficiently thought through for practical implementation.

This paper seeks to provide an overview of the main issues that arise in relation to the implementation of appropriate taxes on companies, whether of the cash-flow or of the income variety. The key word here is the one underlined: in particular it is not our intention to discuss the relative economic merits and properties of alternative tax schemes, which is where the literature is strong and plentiful. Instead, what we do below is provide an inventory of the main practical problems that arise in relation to the use of cash-flow vis-à-vis appropriate income taxes, on matters of administration of the tax, international issues (crediting between fundamentally different tax systems), and transition. But the practical evaluation of the options must also in part be guided by what one wants the tax for--the relevant constraints and objectives in company tax policy, to which we turn first.

II. Corporate Tax: Functions and Bases

Tax reform implies an effort to improve the company tax. But why should company taxation be imposed at all? Since the company is only a legal institution, would it not be more appropriate to tax individuals who own the company, rather than taxing the legal entity itself? This issue raises an important problem: what is the economic role of the company tax?

There are three economic reasons for company taxation that are discussed below: (a) the withholding function; (b) the taxation of rents, as payment for public property rights or privileges; and (c) the instrumentation of economic policy. The appropriate base depends on the economic role or function of the company tax. In the first section below, we discuss the rationale for company taxes based on the function they are supposed to serve. Next, various tax bases are described technically, and related to the equity-income and the cash-flow taxes. In the final section, we discuss the role of integration.

1. Why Tax Companies?

a. The Withholding Function

There are three broad motivations for the use of the company tax as a withholding device for the incomes accruing to capital owners. These are as follows:

First, it may be difficult to fully tax some forms of capital income exclusively at the personal level. In particular, the retention of profits by corporations gives rise to accrued capital gains. If the personal tax is fully levied on all forms of income, capital gains, adjusted for inflation, should be taxed annually on an accrual basis. However, it is difficult to tax accrued capital gains at the personal level, because of the complexities involved with the valuation of non-marketed assets or the problems for liquidity-constrained investors to pay taxes on accrual basis.[3] The company tax, acting as a withholding tax on retentions, ensures that individuals cannot defer tax payments by leaving profit in the company, rather than receiving the income as dividends or interest income. And relatedly, by centralizing at the company level the taxation of incomes deriving from the company, administration is greatly simplified, avoiding having different individuals' holdings in the same company assessed separately for tax purpose--assessments that would then need to be cross-checked or otherwise fed into a single assessment pool to ensure consistency.

A second reason for withholding income at the company level is related to the cash flow taxation at the personal level. With a "lifetime" income or consumption-based tax, savings is exempt from taxation by allowing savings in designated assets to be deducted from the tax base and withdrawals from these assets to be added to the tax base (this is the registered asset method). Alternatively, asset transactions can be ignored with interest exempt from taxation (this is the non-registered asset method). In that case, taxes on economic rents and labor income, unless withheld at source, can be avoided by the simple expedient of paying out these forms of income as dividends or other forms of capital income which escape taxation if the asset is held in the non-registered form. Thus, a company tax such as a cash flow tax could be used to withhold economic rents or labor income when investments are held in the non-registered form.

A third motive for withholding tax at the company level is that the revenue in question would otherwise accrue to foreign investors, and to their tax authorities at home, with little income remaining in the host country. This is of particular importance for LDCs in their relations with industrialized countries, for the typical pattern is that investment capital flows from the latter to the former and the resulting income shows a net flow in the opposite direction, which the host country wants to tax. Section III discusses international issues in more detail but it is worthwhile to briefly outline the argument at this point.

As a result of tax crediting arrangements, many countries with a significant foreign-owned sector are able to levy company taxes that are in part credited against foreign taxes that are levied by capital importing countries on foreign-source income. In general, foreign-source income includes branch profits, dividends, royalties and interest income, and in certain cases the retained profits of subsidiaries. If the host country were to eliminate its company tax, the tax revenue would in effect be transferred to foreign treasuries, without necessarily affecting the total tax burden of the firm. What exactly happens if and when a host country decides to remove or reduce the tax applied on income outflows depends on the details of tax arrangements used by the capital exporting country when taxing the foreign-source income of resident multi-national companies. For example, some capital-exporting countries allow, by treaty, "tax-sparing": any tax incentives given by host developing countries are not offset by increased taxation of the income by the capital exporting country. Such matters are a central element of conventional double-taxation agreements between countries. Currently, and in the absence of such agreements which are still more the exception than the rule between developed and less developed countries, a large number of capital exporting countries tax foreign-source incomes of multinationals giving them a credit (perhaps a deduction in the case of non-treaty countries) for foreign taxes paid.

b. <u>Tax on Rents</u>

The most efficient tax, assuming that revenues and costs are fully observable, is one that applies to pure rents, that is the excess of actual pay over the compensation required by an agent for the conduct of an activity. By this definition, rents are intramarginal return paid to fixed factors of production once adjusting for the cost of risk and uncertainty. Changes in this margin, for example by taxing it, would have no distortionary effects on the investment and production decisions of the agent. Such rents, by this broad definition, in principle can exist all over the economy, including for example the value to an individual of buying a particular car or retaining his job. The problem, from a tax perspective, is one of identification and measurement: trying to tax the inframarginal return to activities makes us hit the marginal one too, and hence confront the response elasticities that so terrify the tax analyst. The one exception of any practical importance, of pure rents awaiting to be taxed, is given by the company tax, which when well designed (not a slight demand) is non-distortionary. In particular the cash-flow tax operates as a rent tax, since the cost of production is fully deductible from the tax base. The cost of risk is implicitly deductible too, so long as tax losses are fully deductible from the base (or are made fully refundable).

On the other hand, pure rents generated by a firm not only are a base that could be taxed efficiently: their taxation, over and above their role in taxing the individual entitled to the income in question can be further justified in terms of the services supplied by the government to the firm--certainly not all of that being of the public-good variety--and which can be construed as a publicly-provided input. The government can extract a rental payment by auctioning off rights for the use of public property or, as an alternative, levy a cash flow tax that collects rents on an "ex post" basis after adjusting for risk and the time value of money. The cash flow tax thus serves as a proxy for <u>rental</u> payments, which should accrue to the government for the use of public property or priviledge provided. An important example of the above is the use of non-renewable resource property which is often owned by the government in many developing countries.

c. Economic Policy Function

Another role of the company tax is to influence economic behavior through it, especially with regard to investment. There are two reasons that may be offered as an argument for the use of a non-neutral company tax: (i) to offset inefficiencies or inequities in the tax system that cannot otherwise be eliminated, and (ii) to offset market failures.

The first of the above is related to the problems arising from the difficulty of taxing some commodities in the economy, or to tax them all at the "right" (highly differentiated) rates. Leisure, or lack of effort, is the prime example of an untaxable commodity. But then, both for efficiency and equity reasons it may be appropriate to tax more highly those goods that are complementary with untaxed commodities. Some economists have argued in favor of income taxes (including company income taxes) on the grounds that savings for future consumption is complementary with untaxed goods such as leisure. However, this argument would support non-uniform commodity taxes in general (i.e., tax cottages and pleasure travel more highly) rather than tax income, particularly company income. We return to this discussion later since the issue is related to the choice between the consumption and income tax base. But the span of untaxable commodities, particularly in LDCs, goes much further than the existence of "leisure" (or lack of effort), which is only the textbook example of an untaxable good.[4] Which set of commodities is untaxed is not a universal constant, but depends instead on the extent of integration of the economy, the size and nature of informal markets and hence, in particular, on the state of tax administration. In this regard, to the extent that it may not be possible to tax individuals directly, it is easier to tax businesses instead, in their sales, their payroll or indeed their income. (This is not the withholding argument revisited, for the population affected by the tax on companies in this case, and the would-be tax on individuals, are likely to be quite different). And equally, payroll taxes paid by companies, rather than wage taxes paid by individuals, may be easier to administer.

The second argument for a non-neutral company tax is to offset the impact of market failures on the economy. The obvious example, which in some cases can be important, are activities whose levels can somehow be deemed to be excessive and which should therefore be discouraged by the tax system (e.g. pollution). Similarly, in certain other cases the level of economic activity may be deficient, such as is often the case with research and development due to inabilities to appropriate privately the eventual benefits of the program. In this case the company tax system may be used to encourage the activity. Fast writeoffs, investment tax credits and above all statutory-rate reductions are expedients commonly used in LDCs to encourage investment in particular assets and industries.

Nevertheless, although fiscal incentives may in principle and in theory have a worthwhile role to play, in practice, more often than not, they are very difficult to apply satisfactorily at all. Other policy tools are often available and preferable. In particular, grants to assist firms provide an alternative approach. One reason for not using tax incentives is that tax law is made more complicated for all taxpayers, even though only some benefit from such assistance. Another is that, unlike grants, fiscal incentives may not allow the government to follow very well the response of investment in the sector affected--let alone to monitor responses and plans at the level of the individual firm. On the other hand, tax incentives admittedly are more easily put in place, since firms do not need to go through a process of applying for grants which is quite an onerous one.

2. <u>Company Bases</u>

The above three functions or objectives of the company tax point at correspondingly different definitions of the taxable base. Thus, if the rationale is to withhold equity income in the form of <u>retentions</u>, this suggests that the company tax base should be of the following type:

$$B_{Ret} = R_a - C_a - Dep - Int - Div,$$

where

R_a = <u>accrued</u> revenues,

C_a = accrued costs,

Dep = economic depreciation valued at replacement cost,

Int = real interest costs,

Div = dividends.[5]

On the other hand, if the motive for corporate taxation is to seek to capture the <u>rents</u> generated by the firm, the tax base would be analogous to B_{Ret}, but correcting the deductions allowed on the capital side, substituting the opportunity cost of the capital base, rK, for the above expression's actual outlays on debt and equity finance, Int + Div:

$$B_{Rent} = R_a - C_a - Dep - rK,$$

where

rK = real cost of debt and equity finance.

As pointed out above, a rent tax could be imposed by expensing capital investment rather than deducting economic depreciation and the real opportunity cost of the capital committed, since the latter two deductions are equal to the purchase cost of capital in present value terms. This is the cash-flow base, which is defined as follows:

$$B_{CF} = R_r - C_r - I,$$

where

R_r = realized revenues,

C_r = realized current costs,

I = gross investment expenditures.

The above cash flow base is the R-Base as defined by the Meade Report. There are other bases that could be used. Of particular interest is a "finance inclusive" cash-flow tax, where all incomings and outgoings are treated as revenues and costs for the purpose of computing the base, and not only those flows pertaining to real (production) transactions. That is, interest payments are in this case deductible, as in standard income taxes. But, in exchange, the loan itself is taxable when first raised, as a flow received by the firm. (In effect the government is then partaking in the loan and sharing in its service). Then the base is the following:

$$B_{R+F} = R_r - C_r - I - iB + NB,$$

where

iB = interest costs on net debt (i.e. gross debt net of financial assets),

NB = net debt issues.

Another cash flow base of interest is the S-Base suggested by the Meade Report. If we recognize that the cash flow of the firm is equal to the flows paid to shareholders, the base would be of the following form:

$$B_S = \text{Div} - \text{New Equity Issues},$$

where capital buy-backs are netted-out in the second term.

In addition to the above, one can develop other bases similar to the cash flow base. Boadway and Bruce (1984) point out that any base will qualify, so long that the present values of tax deductions equal the economic cost of holding capital. Among the myriad of uninteresting possibilities this statement could be applied to is constructing a simple implementable cash flow tax base. For example, instead of expensing capital, capital could be depreciated at any rate, so long as the capital-cost allowance base is indexed by the rate of interest. This would be equivalent to carrying forward tax losses, again at the rate of interest. These points will be discussed further in the next section.

The third motive for withholding taxes, namely to tax income accruing to foreigners, largely depends, in its effects, on what other countries do with respect to the taxation of foreign-source income of multinational firms. When capital exporting countries credit foreign taxes, then the base used by the capital importing country should, to that extent, correspond to that of foreign countries, to ensure maximal crediting. This in itself is a factor that militates against too much unilateral creativity by LDCs on matters of company tax policy. Specifically, if the retentions and dividends of the branches and subsidiaries of firms are fully taxed by capital exporting countries, with a credit given for foreign company taxes, the appropriate tax base in the host country would be equity income:

$$B_Y = R_a - C_a - Dep - Int.$$

The difference between this tax base and B_{Ret} is that dividends are no longer deductible. In fact, retentions of foreign subsidiaries are often exempt from taxation when multinational firms are taxed on their foreign-source income. When this occurs, one could argue that the appropriate tax base should be dividends and other repatriated income, assuming that the capital exporting country is willing to recognize this as a creditable tax. In some instances this has happened, such as in the case of withholding taxes on income accruing to foreigners. These withholding taxes are often credited against foreign taxes and can be used as a substitute for the company tax as a withholding device. However, the withholding tax rates are usually set by treaty and difficult to adjust. Thus the company tax is used for withholding instead.

None of the above motivations for company taxation suggest that the tax base should be equity income (i.e. including both retentions and dividends). The argument for an equity income tax is that withholding on both retentions and dividends is desirable, for personal tax compliance and for international reasons. Indeed, this was the view taken by the Carter Report in its recommendations for corporate taxation in Canada.

There has been considerable disagreement, however, regarding the appropriate base that should be used for company taxation. Much of the debate is related to whether the return accruing to savings should be taxed at both the personal and company levels. Those who have advocated a consumption-based tax at the personal level sometimes argue in favor of a similar tax at the company level to withhold rents and labor income. Those in favor of a comprehensive income tax often argue in favor of a company tax for the purpose of withholding income, because it is difficult to fully tax capital income at the personal level. Company and personal taxes should thus be fully integrated to avoid double taxation.

The advocates of consumption-based taxes argue that consumption or lifetime wealth are the appropriate measures of well-being. The return to savings should not be viewed as income. It is just the price society pays to transform current into future consumption. Thus cash flow taxes are best to use for the purpose of taxing companies. On the other hand, advocates of income taxation view annual income (labor and capital income) as the best indicator of individual welfare measured as "capacity to pay." They also argue that income from savings gives rise to economic power, which like any consumption should be the subject of taxation.

The debate amongst economists regarding the desirability of cash-flow taxation, and more generally the appropriate choice of base for company taxes, has been fairly academic in nature, largely concentrated if not restricted to efficiency and equity issues. The theoretical arguments in favor of the main approaches are fairly well-known, and so it is an empirical issue as to which base is more efficient. Unfortunately, if the choice between the tax bases is to be settled on empirical grounds, considerable patience is in order before a winner emerges, for empirical estimates of behavior in intertemporal settings, in particular on savings responses to interest-rate changes (taxes), are not widely available, nor is what is available much better than suggestive, depending largely on strong assumptions and scant data to capture (or assume away) the many determinants of all kinds that come to play in determining investment and savings decisions. What is clear is that neither theoretical argument, nor the evidence available, nor even recourse to administrative arguments, support neither the view that capital income should not be taxed, nor that if it is, the rate of tax ought to be equal to the rate of tax on labor income.

In some ways, much of this debate is misdirected. Although efficiency and equity issues clearly have critical importance, the actual impact of given policies in these very domains depends critically on the administrative capabilities and on the nature of the economy at large. Discussions are often conducted as if the consumption or income tax bases can be fully implemented. Yet there are a number of problems that would be faced in trying to put in place a cash-flow tax--or indeed a proper equity income tax particularly under high inflation. Similarly, actual outcomes under the efficiency and equity headings depend on the transition--the arrangements used and the path followed in moving from one tax to another. Lastly, most studies, especially in the United States, are based on an analysis of closed economies. Yet some of the most important issues in the discussion relate to the institution, in one country, of an alternative tax base that is not being followed by other countries: international crediting and interaction. This problem applies both to a fully indexed equity income tax as well as to the taxation of cash flow. These issues are discussed in Section III.

3. Personal Taxes: Integration

It is often argued that a cash-flow tax, which can be deemed as a tax on company rents flowing into final consumption, can only be operated in conjunction with a personal consumption tax. This, however, is incorrect: it is not true that overall consistency in the design of direct taxes, seeking to tax either incomes or consumption uniformly, necessarily requires that bases at the personal and company levels be analogous from the outset: appropriate crediting arrangements can do the trick. And in fact such consistency is not always necessarily a requirement: partial implementation of a good principle (if taxing consumption rather than income is indeed a good thing) may be superior to poorer implementation, due to administrative or other limitations, of the whole story.

On the one hand, it is possible to operate a company equity-income tax alongside a personal consumption tax, so long as the company tax is fully integrated by paying a tax credit to the owners of capital. In a closed economy such integration can be easily achieved. In an open economy, however, integration, if done for both domestic and foreign owners, makes company taxation less attractive, since otherwise-withheld income accruing to foreigners is then lost. On the other hand, if integration is achieved for domestic shareholders only, it may only subsidize savings without affecting the impact of the company tax on firm production and investment decisions, at any rate for joint ventures or firms with a presence in international capital markets.[6] The reason for this is that a company can finance capital from both domestic and international sources--integration for domestic shareholders encourages an increased ownership of assets, but not company investment since the latter is based on the international cost of funds.

On the other hand, and more directly of interest here, it is similarly possible to operate a cash flow tax in the presence of a personal income tax. For instance, suppose all capital income is fully taxed at the personal level. It remains nonetheless quite possible to seek to tap some of the neutrality properties of the cash-flow tax with respect to the choice of project and mode of finance by the simple expedient of levying this tax on the company rents, with no integration with the personal tax. Something will have been lost relative to the case where both the corporate and the personal sectors are taxed on a cash-flow/consumption basis. But that benchmark is not relevant here. If it is granted that the personal consumption tax is administratively out of the question at present in an LDC-context, which we take to be the case, the relevant alternatives to consider are to tax incomes throughout the economy, or to tax company-income rents, with its attractive economic properties but at the expense of integration. The alternatives are feasible, and the choice problem interesting, non-obvious.

Nevertheless, the cost that relinquishing (or opting for imperfect forms of) integration represents must not be minimized. With imperfect integration, differences in tax bases and tax rates at the personal and company levels not only distort certain decisions at the margin (the net earnings from the marginal dollar being non-uniform): more importanty, they allow for tax arbitrage, as different kinds of incomes or costs are shuffled before the tax-man's eyes for maximum tay benefit. Many of the practical implementation problems to be discussed below, such as observability of the tax base, compliance and the treatment tax losses, are accentuated when personal and corporate taxes are not fully integrated.

III. Implementation

We now turn our attention to some of the main issues that arise in relation to the practical implementation of an appropriate company tax once this is chosen,be it on income or on rent. The discussion is organized under three main headings: (i) administrative issues, under idealized conditions ignoring both interactions with the rest of the world as well as the transition from where we may be to where we might want to be; (ii) open economy issues, highlighting the limitations and requirements that the existence of transactions with other countries, and of income flows across borders, pose for the conduct of an independent company tax policy; and finally (iii) transition issues, in particular in what concerns the gradual (or otherwise) shift from one base to another--in a policy area where the treatment of stocks in place is by definition at the center of the story: both depreciable assets and interest from outstanding debts. Both the indexed equity-income and the cash-flow taxes are discussed.

1. Administrative Issues

There are several areas of concern, on the general question of the administration of a company tax, that relate directly to the choice of the tax base. On the one hand, a range of questions that can be grouped under the heading of observability of the tax base--that is, fiscal, conceptual definition and accounting implications, under honest reporting. And on the other, the complementary general problems of tax evasion and avoidance, which are of course particularly critical in many LDCs; in particular the treatment to be given to tax losses, and the tax-planning opportunities that these afford.

a. <u>Observability of the Tax Base</u>

There are several problems that arise under the equity-income tax, with respect to the measurement of the tax base by the firm's management and by the tax authorities alike, where the cash-flow tax has an advantage. Some of these are that, under an income tax:

i. The concept of income requires revenues and current costs to be reported on an accrual rather than cash basis, which creates a problem in the determination of tax liabilities when the timing of revenues and expenses is mismatched. This arises in situations when income is generated at a later time relative to the deduction of input costs, such as in the cases of construction projects, resource deposit discoveries, financial income not paid on a yearly basis, and property capital gains.

ii. In particular, capital gains create a problem: in principle it is accrued capital gains or losses that should be the subject of taxation and deductions, but these are only in some cases monitorable even if only imperfectly (e.g. through adjustments in depreciation provisions). And even the use of realized capital gains, already a poorer substitute, is itself subject to problems of measurement.

iii. Relatedly, and notably, economic depreciation--the physical wear and tear of assets, valued at replacement cost net of real capital gains--is notoriously difficult to measure, especially in countries that have thin secondary markets for capital.

iv. The treatment of inventories, of inputs or outputs, and hence the implicit costing of goods actually sold, is similarly a problem. Simplified ad-hoc rules to allocate the "true" economic cost associated to current revenues must always be resorted to.

v. On the other hand, a good equity-income base in principle requires interest deductions to be adjusted for inflation. This requires not only the reporting of interest costs, but also the value and in effect the composition of debt liabilities. This can be difficult to accomplish since detailed accounting is required.[7]

vi. And last, it is impossible to measure in a remotely adequate fashion the right depreciation for a number of assets, such as research and development, advertising, depletable assets, and other capital expenditures, which are thus expensed on a current basis in most tax systems.

With cash flow taxation, at any rate in its basic definition, the problem of measuring the base is greatly simplified from the economic and accounting points of view, since all of the above problems essentially disappear. The use of sales less purchases realized (or of variants discussed in §II-2 above, such as that incorporating financial flows) as the base of the tax eliminates any fiscal role for the concept of economic costing. This rids the tax administration of the need to deal at all with questions pertaining to the timing of benefits, capital gains, depreciation, and inventory flows, all of which remain the firm's but not the tax authority's concerns. Capital gains and depreciation, in particular, disappear as legal concepts and headaches, for all purchases are simply deducted in full when made, with no memory of that transaction being then necessary. Any subsequent capital divestiture or stripping at the end of the day are then treated as fully fresh forms of taxable revenue.

Inflation adjustment too becomes unnecessary:[8] both for the depreciation side, where the requirement to adjust for inflation is a traditional (and obvious) concern; but also, and more critically, in relation to interest payments, where the adjustment for inflation (sometimes dubbed "monetary correction" of the principal, prior to the addition of real interest) is increasingly recognized as an urgent must in non-indexed high inflation countries, but one whose administrative requirements are very considerable indeed (as exemplified by the case of Mexico, a country with one of the strongest tax administrations in LDCs, and where a thorough reform of income tax along these lines was introduced in early 1987, giving rise to enormous administrative difficulties in the early stages of the process).

On the other hand new problems arise in cash flow taxation relative to an income tax. The immediate expensing of buildings and structures, although technically desirable and similar in nature to any other business expense, can be a problem, giving rise to enhanced evasion opportunities (to which we turn in the next section) and in particular yielding an exceedingly lumpy time profile of tax obligations, which may in fact make it necessary to create a special regime for them in some cases.

The taxation of financial institutions is a serious problem, which again requires them to be treated on an ad-hoc basis: the reason is that most of their revenues and outlays are financial flows, to which the tax does not apply, and then they do buy equipment and materials, technically leaving a negative net cash flow. (The lending/borrowing spread is what in effect creates the rent the tax wants to but cannot catch.) And most importantly, apart from significant but specific (sectoral) examples, the tax has not been implemented in a comprehensive way in any country. This lack of precedent and experience makes it difficult to predict what exactly other difficulties in the administration of the tax might turn out to be.

The picture, therefore, is not clear, on whether or not the cash flow tax is superior to income taxes from the purely administrative (accounting and definitional) point of view. It is stronger "at the core", in that the definition of the tax base for the majority of productive sectors is very straight-forward--and this is potentially an interesting consideration for developing countries in particular, where accounting and administrative capabilities are typically very modest. But on the other hand the tax presents serious problems "at the fringes", such as in the treatment of certain major sectors or, as discussed in §II-3, in the interface with a personal income tax. Perhaps these problems do not quite overweigh the essential simplicity of the tax, and its neutrality vis-à-vis investment and financial decisions of the firm. But then, administration goes beyond the accounting demands placed by the tax, on firms and government, under conditions of "honest reporting". One must discuss the ways in which the choice among the bases we are considering may contribute to tax losses through enhanced opportunities for tax planning or for other means to reduce or escape taxes by firms. The literature, as on the above discussion, provides us with preciously little guidance on these matters.

b. Avoidance and Evasion

A compliance problem arises, generally, in the tax treatment of losses. In order to maintain neutrality, it is argued, tax losses should be fully refundable, granting the firm a credit or its present-value equivalent against them. In this manner risky assets are not penalized, and refundability of tax losses becomes an implicit deduction for risk, with losses and gains being fully shared by the government.

Refundability is accomplished by giving a refundable tax credit to the firm, or carrying forward losses at a rate of interest. And if the firm is liquidated, any tax credit owed to it should in turn be paid. This applies both to equity-income and to cash-flow taxes. But tax losses are, in principle, more likely with the cash-flow base, where taxes due will typically be negative while the firm is growing and investment is expensed. The tax revenues owed by the firm may thus be uneven, as was noted earlier. This depends on the type of cash flow tax that is instituted. With the "R+F" base of the Meade Report, the tax may fluctuate less. And if the modified method of cash-flow taxation is used, whereby costs are depreciated, not fully expensed, with the undepreciated value of the base indexed by the rate of interest, the tax base need not be negative at all. But under the simpler--and easiest to run--basic definition of the cash-flow, important tax losses will normally occur in the early years of an investment.

Now the existence of tax losses is not in itself a serious issue, provided different sectors and activities are all taxed and evenly taxed across the economy. The problem arises when income can be shifted from taxed into tax-exempt or otherwise favored activities with any ease. Suppose for example that a firm writes off capital with a refundable tax credit paid to it. If the firm can shift income to non-taxable companies (such as pension funds), credits paid to the company essentially subsidize capital acquision.

The above tax-planning possibilities are not limited to the effective management of tax losses. They are normally available more generally, for tax-paying firms to shift income to activities that are exempt from or at any rate favored by taxation. The use of loss-transfers from a tax-loss corporation to a taxpaying one is only one example of arbitrage used by firms in minimizing tax payments. But it is one that may be of relevance to the choice of base that interests us here.

More generally, tax avoidance, and outright evasion, arise in two broad types of situations. The first, due directly to difficulties in properly measuring and monitoring the tax base. This enables taxpayers to take advantage in one form or the other of the relative lack of information on the part of the tax authorities, through failure to declare some transactions altogether, under-reporting or over-invoicing others, costing private consumption, etc. Secondly, it is generally true, and particularly so in less developed countries, that some activities cannot be--or simply are not--taxed, whether this is reflected in the law or not. A considerable amount of (legal) tax avoidance takes place this way, as resources flow towards these opportunities. Outright evasion too is often generated by these gaps in the tax base, through the use of mechanisms like transfer pricing, or the inability of the authorities to separate the accounts pertaining to favored and non-favored activities performed jointly by a firm (such as exports vs. domestic sales where the former benefit from special treatment).

It is true that governments could often do considerably more to avoid the erosion of the tax base and the allocative distortions that each of the above problems gives rise to, by closing gaps, simplifying the system and making a serious effort to improve enforcement. But our interest here is more restricted and specific, to discuss and evaluate alternative bases for the company tax only, and it is safer not to rely on a great deal of progress with the reform of the rest of the tax system or of its administration.

So the question we need to ask here is not how to get rid of evasion and avoidance, but whether the characteristics of the cash-flow tax would make it easier or harder to find opportunities to evade or avoid. In general terms, the only solid answer here is, first, that we do not know, for there is no general theory of what facilitates evasion and, again, there is no wealth of experience in the international community on the use of cash-flow taxes to draw from. And second, that the main avenues for evasion would probably not be affected at all, for in principle the informational needs and resources of the tax authority remain basically unchanged--it is only the way the information is used that is different. But two or three further, if specific, features of the cash-flow tax can be mentioned which give some ground for concern that evasion may be easier under it, in addition to the point discussed above:

- First, the cash-flow definition of "income", by being less constant than true economic income due to the lumpiness of investment outlays, says less about the standard of living (permanent income) of the recipient. This can be important in poorer LDCs in particular, where presumptive indicators of income regularly play a major role.
- Secondly, the great disparity that the cash-flow tax introduces between fiscal and economic variables opens the possibility for increased tax arbitraging, between firms or across time. For example, a company with no taxes due in the aftermath of a large investment outlay, and another one, can engage in transfer pricing to boost the non-taxable revenues of the former, which may then go into artificial liquidation to start again in new pastures (where it cannot be taxed). Or a firm can invest today and enjoy a de facto tax-free status for a while, and then--again--dissolve itself when the holiday is over by selling to a tax-exempt firm. The value at which assets are sold is much harder to police than the operational accounts of the firm.

One could overemphasize, however, the tax evasion issues arising from cash flow taxation in comparison to the income tax. Under the income tax, evasion possibilities arise in a number of contexts: the reporting of capital gains and interest, the timing of asset sales and inventories, and the treatment of compensation paid to workers. Tax evasion under the income tax is well documented and could be as important as that under the cash flow tax.

2. International Issues

International issues play an important part in company tax policy for two reasons. First, capital, especially new capital, is generally quite mobile--unlike labor whose migration is normally highly restricted. Since capital, and the managerial expertise associated with it, are complementary with employment, countries often compete for capital to maintain their competitiveness in world production. Second, company income is also highly mobile across countries, even in the presence of restrictions on its flow. It is quite easy for corporations to shift profits from one country to another by rearranging financial assets and liabilities, or by using other techniques such as transfer pricing, without moving real resources. And then, by taking advantage of differences in tax regimes across countries, multinational corporations minimize their payment of worldwide company taxes, taking deductions in high-tax rate countries and reporting income where tax rates are low. This, of course, can be partly controlled by means of international tax treaties and other methods that are used to tax and regulate the taxation of foreign incomes.

In this context, there are thus two forms of tax competition that influence a country's company tax policy. First, there is capital competition, which arises when countries try to compete for investments available to world markets. And secondly, there is tax-revenue competition that arises as countries seek to attract and tap taxable profits that can be shifted from one country to the next both in the shorter run under a given international allocation of capital resources and in the longer run as the latter move.

From the perspective of the present paper international taxation raises two important, separate but complementary sets of issues, each of which has received a considerable amount of attention in recent tax reform efforts and proposals. Namely:

- What is the best company tax policy to pursue by an open economy: an Income Tax, which is better at retaining tax from financial outflows and remittances; or a Rent Tax, which may be more effective at attracting the marginal foreign investor--or some other tax or combination of these?
- And on the other hand, to what extent can a country pursue an independent company-tax policy? Must countries adopt in law, or accept in practice, essentially uniform tax policies? And if a country does pursue a different company tax system, such as cash-flow taxation or indeed an indexed income tax system, what provisions must be adopted to ensure that the policy can be properly implemented?

The answers to these questions depend on two factors. Firstly, on the (de-facto) openness of capital markets in the country in question. If the country is a small open economy, which faces a fixed interest rate determined by international bond and equity markets and fixed product prices, then its company tax policy is in turn greatly restricted: both gross and net returns are wholly market-driven. However, as we discussed in Section II above, international tax issues remain important to a small country especially if there is a large presence of foreign capital operating within its borders.

If the country is large, on the other hand, it can influence rates of interest on international securities to its advantage, and can thus use tax policy for this purpose--the country can make itself better off at the expense of others, essentially. For example, if the country is a capital importer, a tax on investment that lowers the international demand for capital forces down the borrowing rate faced by the country.

Many developing countries are relatively small, so it is unlikely that their company tax policies influence international interest rates or product prices. For the purpose of the discussion below, we only consider the small open economy.

The second factor that should be borne in mind is the reaction of foreign countries that are negatively affected by policies pursued by self-interested national governments. In Section II it was argued that a country imposes company taxes in the interest of withholding income accruing to foreigners. This is an example of "tax exportation", which is beneficial to a country but causes harm to others. Because of tax exportation, countries may rely too much on distortive capital taxes that may be avoided if the countries signed cooperative agreements.

Keeping in mind the above two factors, we address the three questions listed above: (a) what is the best company tax base for an open economy, (b) must company tax bases be uniform worldwide and (c) how can an independent tax policy be implemented.

a. Company Taxation in an Open Economy

In Section II we have already discussed the role of the company tax in withholding income from foreigners. In this subsection, we wish to be more precise about the role of company taxation in an open economy.

In an open economy, two particular issues arise with respect to company taxation. The first is the taxation of income accruing to foreigners, and the second is the taxation of foreign-source income of resident corporations. It is the first of these that has greater interest in the case of LDCs. On the other hand, in addition to the company tax there is the withholding tax levied on income accruing to non-residents, which is often reduced by treaty negotiation. The withholding tax is sometimes viewed as a tax-sharing device where one country allows foreign withholding taxes to be credited against their own taxes levied on foreign-source income. In our discussion below, we consider withholding taxes as one form of taxation at the company level.

With respect to the first issue, one can consider two types of foreign recipients of income: foreign individuals (or corporations), and governments. If foreign governments exempt foreign-source income, income earned by a company fully accrues to the foreign private sector. A small open economy would find that the most efficient tax would be a rent tax, since the distortion of foreign-capital investment decisions is undesirable.

If foreign governments tax foreign-source income accruing to investors, and credit foreign corporate taxes paid by their resident firm, the type of company tax desired by a capital importing country is different. Even if the capital importing country is small, an income tax that qualifies for foreign tax crediting may be desirable. Many countries, such as the United States, Japan and the United Kingdom, credit foreign taxes paid on repatriated income-dividends, interest, royalties and branch profits. Often, but not always, the retentions of foreign subsidiaries are exempt from taxation by capital exporting countries. If this were the case, a company tax on repatriated income would be desirable for the capital importing country, since there is no efficiency loss due to tax crediting abroad. In certain cases it might be difficult for a multinational firm to credit foreign taxes. For example, since interest is deductible from the tax base in a capital exporting country, a corporate tax in a capital importing country that does not allow the deductibility of interest may be too large for the multinational to credit. For a small capital importing country, an uncredited tax would distort capital inflows.

With regard to the taxation of foreign-source income earned by residents, the main issue faced by a country is whether income should be taxed or be exempt from taxation. If the country is small, one can argue that it would be efficient not to tax these capital flows at all: only source-based company taxation is desirable, to allow domestic investors to obtain the greatest possible rents from capital invested abroad. Many small countries have followed this course by exempting foreign-source income. If foreign-source income is earned in a "tax-haven", the capital exporting country may choose to tax the income only to protect its own company tax base. These issues relate to implementation of company taxes that are discussed in more detail below.

Currently, capital exporting countries that tax foreign-source income allow foreign corporate income and withholding taxes to be credited. Sales and property taxes are deductible from taxable income. If a capital importing country wants to maintain maximal crediting, it wishes to ensure that its own company tax is recognized by the capital exporting country as a creditable tax. For example, would a rent tax such as a cash flow tax be creditable? What about a tax on dividends (such as the Advance Corporate Income Tax) or a tax on the capital assets? These issues can be important if there is a significant amount of foreign capital invested in the capital-importing country.

b. Uniformity of Tax Bases

Company tax reform has been remarkable for its similarity across countries. In most countries, corporate tax rates have been lowered and the tax base broadened by reducing tax incentives. It has often been argued that a country is forced into following the tax reform measures adopted by others in order to preserve the company tax base. But, given the multidimensional nature of tax policy, and with many other relevant instruments at hand, does it still follow that it is impossible for a country to pursue an independent company tax policy?

Two arguments have been advanced as to why countries choose uniform company tax policies. The first is the "capital competition" explanation suggested above, which forces countries to adopt uniform tax bases, for if there were differences capital would flow to the least taxed country. In order that tax-induced movements in capital are avoided, countries choose similar tax bases and rates.

This argument is largely unconvincing. It is truer, if anything, as a statement on the level of taxation, rather than on the structure. And then, although political pressure might prevail on a government to tax an industry similarly to what is done in a foreign jurisdiction, there is no clear economic justification for the equalization. Even if capital is relatively mobile, tax regimes could differ depending on the use of tax revenue, and certainly the structure, with other tax instruments coming into play. If, for example, a given country were to stick to a high-rate/many-incentives approach, it will admittedly not see internationally mobile capital coming into its taxed sectors, as argued. But, by the same token, it will or may see resources flowing into the sectors the country manifestly wishes to promote! Counter-arguments along macroeconomic lines, to the effect that those firms will <u>not</u> go into that country because it is or will fall into fiscal chaos would not be at all convincing in this connection: the general statement cannot be made, and the argument that taxes need to fall into line pertains to a different order of ideas. Similarly, and leaving aside the issue of crediting, a small open economy might find it in its interest to levy a cash-flow tax so that capital flows are not distorted. If other countries then choose distortive capital taxes, there is no reason for the small economy to adopt a similar distortive capital tax. Moreover, if company taxation is an important source of revenue, a country might be willing to choose a higher capital tax than other countries to finance public expenditures. While tax regimes in countries might affect each other and capital competition would come into play, uniformity of taxes is not the necessary outcome.

A better argument for some degree of uniformization to be imposed among countries arises in relation to "tax revenue competition", in the face of the rich opportunities for internationl tax-arbitraging that firms or groups of firms can enjoy. Namely, if a country chooses a tax system that is significantly different from others', the tax may not be easily implementable, since a company can easily shift reported profits from one country to the next. This argument especially applies when statutory tax rates differ. Transfer pricing techniques, financing and leasing arrangements, and other tax planning devices are used to ensure that income is reported in low taxed countries, and deductions are declared where taxes are high. Some jurisdictions in Canada, such as Quebec, have chosen very low corporate income tax rates (using other capital taxes instead) to avoid transfer pricing and other arbitrage schemes.

"Tax revenue competition" is a problem treated quite seriously by governments. It often leads to the adoption of distortive company tax bases, but ones that are uniform with those in the rest of the world. Arguments are often raised against indexed company income, and cash flow taxes on the basis that no other country has a similar tax. The usual justification for uniform tax bases is that tax arbitrage gives multinational corporations an advantage compared to domestic firms. It might be possible to pursue other company tax policies so long as they are implementable.

c. Unilateral Adoption of New Directions on Company Taxation

The extent to which a country can pursue an independent company tax policy depends on the prevailing tax systems in various countries. To implement a company tax that is not similar to other countries requires an intricate understanding of international tax systems. It is quite difficult to discuss these issues in detail but a few points are raised below to illustrate some of the problems that might arise.

If a country tries to implement a cash flow or an income tax with fast writeoffs and with a tax rate higher than that in other countries, several immediate issues arise. First, some costs such as overhead costs that are may be expensed or depreciated quickly, tend to be allocated to the jurisdiction that provides the most generous incentive. It is also possible for the firm operating in a cash flow jurisdiction to lease